JPRS-WST-84-028

20 August 1984

West Europe Report

SCIENCE AND TECHNOLOGY

TABLES OF CONTENTS

JPRS-WST-84-001, 4 Jan 1984

JPRS-WST-84-021, 28 Jun 1984

FBIS FOREIGN BROADCAST INFORMATION SERVICE

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

JPRS-WST-84-001

4 January 1984

WEST EUROPE REPORT
SCIENCE AND TECHNOLOGY

CONTENTS

AEROSPACE

Briefs
New French Aerospace Center 1

AUTOMOBILE INDUSTRY

Saab Claims World's Most Modern Engine-Assembly Plant
(Ulf Bergmark; NY TEKNIK, 13 Oct 83) 2

Volvo LCP: New Materials, Production Methods
(Ulf Bergmark; NY TEKNIK, 20 Oct 83) 12

Daimler-Benz Developing Electronic 'Active Suspension'
(Th. Fuhrmann; VDI NACHRICHTEN, 11 Nov 83) 22

BIOTECHNOLOGY

Reorganization of German Biotech Development Sought
(G. H. Altenmueller; VDI NACHRICHTEN, 30 Sep 83) 25

CIVIL AVIATION

Briefs
Dornier Do 228 Sales 28

COMPUTERS

Italy's SGS To Make Minicomputers in France
(MINIS ET MICROS, 3 Oct 83) 29

Briefs
Swedish Intelligent Computer 30

FACTORY AUTOMATION

CVD Technology Moves From Lab to Industry in Sweden
(Fredrik Lundberg; NY TEKNIK, 3 Nov 83) 31

FRG Machine Tool Industry Begins Recovery
(L'USINE NOUVELLE, 3 Nov 83) 35

MICROELECTRONICS

Review of Present Activities, Future Plans of MHS
(ELECTRONIQUE ACTUALITES, 4 Nov 83) 38

Financial Situation, Plans, by JP Della Mussia
Technical Innovations

SGS's New Catania Plant: Advanced Technologies, Automation
(L'USINE NOUVELLE, 3 Nov 83) 43

Briefs
Swedish Microelectronics Program 45

SCIENTIFIC AND INDUSTRIAL POLICY

FRG Investment Congress Discusses Venture Financing
(VDI NACHRICHTEN, 11 Nov 83) 46

Pros, Cons of Venture Capital in France
(Olivier Picon; ELECTRONIQUE ACTUALITES, 18 Nov 83) 49

JPRS-WST-84-002

10 January 1984

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

ADVANCED MATERIALS

Netherlands Group To Develop 'Super Membrane'
(PT ACTUEEL, 28 Sep 83) 1

Briefs
Composite Materials Institute in France 2

AUTOMOBILE INDUSTRY

FRG Makes Carbon-Fiber Plastic Engine Mount for Audi
(VDI NACHRICHTEN, 7 Oct 83) 3

COMPUTERS

FRG's Nixdorf To Expand Activities in Asia
(VDI NACHRICHTEN, 7 Oct 83) 5

Danish Computer Firms Join To Form Export Company
(DIE COMPUTER ZEITUNG, 28 Sep 83) 7

France's 'Bull' Plans Micro Products, Structural Changes
(COMPUTERWOCHE, 7 Oct 83) 8

Role of GMD in Promoting Information Technology in FRG
(Anatol Johansen; VORWAERTS, 25 Nov 83) 11

EC Ministers Agree on 'ESPRIT' Funding
(FRANKFURTER ZEITUNG/BLICK DURCH DIE WIRTSCHAFT, 9 Nov 83) 14

Siemens Revamps 7500 Computer Line, Reduces Price
(ELECTRONIQUE ACTUALITES, 11 Nov 83) 16

Briefs
FRG-Netherlands Software Firms 18
Olivetti-Philips Floppy Disks 18
Itoh Subsidiary in FRG 18

FACTORY AUTOMATION

FRG's Comprehensive Industrial Automation Program
(HANDELSBLATT, 9 Nov 83) 19

Use of Robots, Computers at FRG's Daimler Benz
(Waldemar Schaefer; HANDELSBLATT, 30 Nov 83) 21

Sweden's ASEA Develops Robot for Arc Welding
(VDI NACHRICHTEN, 25 Nov 83) 26

Audi Invests DM 2 Billion To Buy Robots, Automate Production
(VDI NACHRICHTEN, 5 Aug 83) 27

Briefs
Siemen's 'Videomat' Seeing Robot 30
British-Japanese Robot Cooperation 30

MICROELECTRONICS

Italy's Electronics Industry Loses Market Shares
(ELEKTROTECHNIK, 26 Sep 83) 31

Thomson's Current, Projected Earnings in Electronic Components
(ELECTRONIQUE ACTUALITES, 11 Nov 83) 32

LETI To Do Applied Research, Thomson To Step Up IC Work
(Claude Amalric; L'USINE NOUVELLE, 24 Nov 83) 36

Briefs
Thomson Special Circuits Division 38

SCIENTIFIC AND INDUSTRIAL POLICY

VDI Patent Office in FRG Receives Soviet Documents
(VDI NACHRICHTEN, 7 Oct 83) 39

Siemens Executive on Electronics Competition With Japan
(HANDELSBLATT, 30 Nov 83) 41

Siemens, Nixdorf Suggestions to Make FRG Computers More Competitive
(COMPUTERWOCHE, 16 Sep 83) 43

French R&D Budget for 1984 Presented, Comments by Fabius
(Laurent Fabius; AFP SCIENCES, 17 Nov 83) 46

Three FRG Banks To Form Venture Capital Firm in Berlin
(VDI NACHRICHTEN, 23 Sep 83) 53

Effects of New EEC Financial Reporting Law on Netherlands
(Tjeerd Dorlandt; PT ACTUEEL, 28 Sep 83) 55

Market Strategy, High-Tech Products of Netherlands' Philips
(Ton Oostveen; DE TIJD, various dates) 59

FRG To Invest in Robots, CAD/CAM, Flexible Manufacturing
(VDI NACHRICHTEN, 7 Oct 83) 97

BMFT Releases Details on 1981-1983 FRG Science Expenditures
(ATOMWIRTSCHAFT/ATOMTECHNIK, Nov 83) 99

FRG To Found 'Technology Factory' To Help Young Researchers
(VDI NACHRICHTEN, 25 Nov 83) 104

Briefs
Olivetti To Promote Venture Capital 106

TECHNOLOGY TRANSFER

Briefs
Siemens Technology to China 107

JPRS-WST-84-003

16 January 1984

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

ADVANCED MATERIALS

France Develops Own Aluminum-Based Composite Ceramic
(INDUSTRIES & TECHNIQUES, 1 Sep 83) 1

AUTOMOTIVE INDUSTRY

Fiat Conducts R&D in Ceramic Parts for Diesel Engine
(SCIENZA E VITA NUOVA, Jun 83) 3

BIOTECHNOLOGY

Schering's Asmis on Biotech Research
(Herbert Asmis Interview; CHEMISCHE INDUSTRIE, Aug 83) 6

CIVIL AVIATION

FRG Journal Analyzes State, Prospects of Airbus Programs
(HANDELSBLATT, 25/26 Nov 83) 10

General Analysis
UK Remembers Concorde
Airbus Strategy Confirmed

COMPUTERS

Briefs
Esprit Software Study 17

FACTORY AUTOMATION

French Develop Software for Factory Machine Tools
(Franck Barnu; INDUSTRIES ET TECHNIQUES, 10 Sep 83) 18

MICROELECTRONICS

Foreign-Owned Electronics Companies Flourish in Ireland
(Ulf Peter Hellstrom; AFTENPOSTEN, 6 Dec 83) 20

Danish Electronic Equipment Onboard Spacelab
(Michael Rastrup Smith; BERLINGSKE TIDENDE, 30 Nov 83) 23

Earnings by Sector for 1982 of Thomson, EFCIS
(MINIS ET MICROS, 1 Sep 83) 25

Marked Increae in Thomson-CSF Semiconductor Activities
(J-P Della Musia; ELECTRONIQUE ACTUALITIES, 2 Dec 83) 26

Netherlands' Philips Expects Gradual Profit Increase
(NRC HANDELSBLAD, 30 Nov 83) 30

Philips Opens New Glass Fibers Plant in Netherlands
(NRC HANDELSBLAD, 30 Nov 83) 31

Siemens Makes Glass-Ceramic Mask for Ultrathin Screen
(BUREAUX D'ETUDES, Sep 83) 32

French Companies Develop Image Processing Equipment
(ROBOTS, Nov 83) 33

'PUCE' Plan of France's DIELI To Promote Microelectronics
(P. Schaeffer; ELECTRONIQUE ACTUALITES, 25 Nov 83) 34

French Firm Announces New Type of Thin Film Resistor
(ELECTRONIQUE ACTUALITES, 25 Nov 83) 37

SCIENTIFIC AND INDUSTRIAL POLICY

Fabius Presents Plan To Encourage Filing of French Patents
(INDUSTRIES ET TECHNIQUES, 10 Sep 83) 40

Netherlands Founds 'Science Park' in Groningen
(PT AKTUEEL, 14 Sep 83) 42

CGE, Thomson Plants, Personnel Affected by New Agreement
(Pierre Morville, Alain Pauche; L'USINE NOUVELLE,
29 Sep 83) 44

Briefs
Italian Funds for Innovation 49

TECHNOLOGY TRANSFER

Data Banks Keys to Innovation, Tech Acquisition
(CHEMISCHE INDUSTRIE, various dates) 50

Decbema/Fiz Data Bank Reviewed, by Reiner Eckermann
Use in Chemical/Biochemical Research, by Guenther Loose

JPRS-WST-84-004

24 January 1984

WEST EUROPE REPORT
SCIENCE AND TECHNOLOGY

CONTENTS

AEROSPACE

Fokker Wants To Start New Netherlands Space Program
(Sjoerd van der Werf; NRC HANDELSBLAD, 7 Dec 83)..... 1

Sweden's Kiruna May Be Future Launch Site for Satellites
(Caj Noren; DAGENS NYHETER, 2 Dec 83)..... 5

View of Ariane Countdown Procedures, Kourou Launch Facilities
(Alain Perez; INDUSTRIES & TECHNIQUES, 10 Sep 83)..... 7

AUTOMOBILE INDUSTRY

ERRATUM: Saab Claims World's Most Modern Engine-Assembly Plant
(Ulf Bergmark; NY TEKNIK, 13 Oct 83)..... 17

ERRATUM: Volvo LCP: New Materials, Production Methods
(Ulf Bergmark; NY TEKNIK, 20 Oct 83)..... 27

Briefs
Renault, Gerin Automation Plan 37
Volvo Buys Its Renault Stock 37

BIOTECHNOLOGY

Survey of Finland's Biotech Industry, Future
(Lena Westerholm; HUFVUDSTADSBLADET, 12 Nov 83)..... 38

Finnish Interferon Research, New Applications
(Lena Westerholm; HUFVUDSTADSBLADET, 22 Nov 83)..... 42

Ciba-Geigy To Market Biotech Products Soon
(CHIMIE ACTUALITES, 28 Nov 83)..... 45

Biogen, Japanese Join for Research, Marketing
(CHIMIE ACTUALITES, 5 Dec 83)..... 47

Canada Developing Biotech Tools for Pollution Control
(AFP SCIENCES, 10 Nov 83)..... 48

Briefs
Biogen Licenses U.S. Process 49

CIVIL AVIATION

New Fokkers, No Breakthrough But Company Is Optimistic
(J. Heinemans; ELSEVIERS MAGAZINE, 3 Dec 83)..... 50

A320 Described as 'Technological Leap'
(REVUE AEROSPATIALE, Nov 83)..... 53

COMPUTERS

Bull Launches Production of New Minicomputer
(ELECTRONIQUE ACTUALITES, 2 Dec 83)..... 55

Thomson Negotiates With U.S. Firms on Microcomputer Production
(ELECTRONIQUE ACTUALITES, 2 Dec 83)..... 57

Briefs
'Ultramodern' Photomasking Plant in France 58

MICROELECTRONICS

French Firm Develops Dry Etch Equipment for Microelectronics

(ELECTRONIQUE ACTUALITES, 2 Dec 83)..... 59

France's Eurotechnique Announces 128 K EPROM
(ELECTRONIQUE ACTUALITES, 2 Dec 83)..... 60

Siemens Samples Power MOS With Fast Parasitic Inverse Diode
(J-P Della Mussia; ELECTRONIQUE DE PUISSANCE,
Nov 83)..... 62

Circuits, SC's Integrated With Italian SGS's Chopping
Regulator
(JP Della Mussia; ELECTRONIQUE DE PUISSANCE,
9 Sep 83)..... 65

Briefs
Siemens Competitive Integrated MOS 68

SCIENTIFIC AND INDUSTRIAL POLICY

Olivetti Establishes Venture Capital Fund
(TECHNISCHE RUNDSCHAU, 28 Aug 83)..... 69

Goals, Funding of 'PUCE' Plan for Promoting Microelectronics
(Jean-Claude Hirel Interview; ZERO UN INFORMATIQUE HEBDO, 5 Dec 83)..... 71

JPRS-WST-84-005

7 February 1984

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

AUTOMOBILE INDUSTRY

Volkswagen Losses Increase During First Three Quarters
(AFP-AUTO, No 3362, Nov 83) 1

Fiat Introduces 'Uno' With Continuously Variable Transmission
(L'ARGUS DE L'AUTOMOBILE, 27 Oct 83) 2

France's CNRS, Renault To Collaborate on Research Program
(AFP SCIENCES, 22 Dec 83) 5

Briefs
Renault Automation 6
Renault, U.S. Industrial Lasers 6

BIOTECHNOLOGY

Biogen, Greencross Market Hepatitis Antigen
(CHEMISCHE RUNDSCHAU, 1 Jun 83) 7

UNIDO Focus on Third World's Biotech Needs
(CHEMISCHE RUNDSCHAU, 12 Oct 83) 8

British Biotechnology Investment Fund Profiting
(CHEMISCHE RUNDSCHAU, 19 Oct 83) 9

CIVIL AVIATION

Fokker Announces Two New Aircraft Projects
(LE SOIR, 28 Nov 83) 10

COMPUTERS

Rhone-Alpes Region Becomes French 'Silicon Valley'
(Andree Muller; TEMPS REEL, 17-30 Oct 83) 12

FACTORY AUTOMATION

Renault Shape-Recognition Robot
(ROBOTS, Nov 83) 17

SCIAKY Develops Modular-Robot-Elements Concept
(ROBOTS, Nov 83) 19

LAAS Develops Coordinated Manipulator Control
(ROBOTS, Nov 83) 21

French Press Views CAD Facilities at Peugeot
(ELECTRONIQUE ACTUALITIES, 2 Dec 83) 22

Briefs
Eyes for Machine Tools 24

SCIENTIFIC AND INDUSTRIAL POLICY

Organization, Funding of R&D in Switzerland
(Emanuel Mooser Interview; TECHNISCHE RUNDSCHAU, 13 Sep 83) 25

France's '84 Research Budget Inadequate for Programmed Goals
(Maurice Arvonny; LE MONDE, 16 Nov 83) 30

Financial Status, Strategy of France's Matra
(Claude Amalric; L'USINE NOUVELLE, 8 Dec 83) 32

Briefs
New Philips Research Plan 35
Four Italian Research Programs 35

TECHNOLOGY TRANSFER

Mail Drops in Zug in Search of Their Owners
(Wolfgang Winter; DIE WELTWOCHE, 8 Dec 83) 36

France Sells USSR Flexible Workshop With Unimate Robots
(INDUSTRIES ET TECHNIQUES, 1 Nov 83) 39

Briefs
USSR Imports Chemical Equipment 41
French Engineer Accused of Espionage 41
USSR Buys Swiss Biotech Equipment 41

JPRS-WST-84-006

13 February 1984

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

ADVANCED MATERIALS

French Firm Acquires U.S. Technology for Jet Engine Composites
(Pierre Laperrousaz; L'USINE NOUVELLE, 15 Dec 83)..... 1

Briefs
Energy Industry Composite Materials 5

AEROSPACE

Matra's Commercial Spinnofs From Space Program Activities
(H. Pradenc; ELECTRONIQUE ACTUALITES, 9 Dec 83)..... 6

AUTOMOBILE INDUSTRY

Aerospace Technology Used in French Fuel-Efficient-Car Study
(REVUE AEROSPATIALE, Dec 83-Jan 84)..... 9

CIVIL AVIATION

Financial Structure, Funding for Airbus Industrie
(Gerhard Schwarz; NEUE ZUERCHER ZEITUNG, 1-2 Jan 84)..... 11

COMPUTERS

France Contemplates Entering U.S. Software Market
(Eric Seyden; TEMPS REEL, 10-13 Nov 83)..... 16

Briefs
New Bull Minicomputer Models 19
FRG Software Association Formed 19
French-Indian Research Agreement 20
NEC-Bull Contract 20

FACTORY AUTOMATION

Review of Industrial Robotics Development Activities
(ZERO UN INFORMATIQUE, Jan 84)..... 21

French Firm Markets Numerical Control Softeare
(Michel Defaux; L'USINE NOUVELLE, 5 Jan 84)..... 23

French Gear Up To Challenge United States in CAD/CAM Market
(Jacques Antoine; L'USINE NOUVELLE, 5 Jan 84)..... 25

Briefs
British 'Intelligent' Welding Robot 27

MICROELECTRONICS

French Gallium Arsenide IC Substrate Does Not Dislocate
(ELECTRONIQUE ACTUALITES, 9 Dec 83)..... 28

FRG Funds Microelectronics Research at GMD, Universities
(COMPUTERWOCHE, 30 Sep 83)..... 30

Briefs
FRG Makes Fastest Switching Circuit 32
Thomson Semiconductors in Aix-les-Bains 32

SCIENTIFIC AND INDUSTRIAL POLICY

FRG High Tech R&D Grants for 1982 From BMFT
(BMFT FOERDERUNGSKATALOG 1982, Jul 83)..... 33

Total Grants to Institutions, Projects (1981-82)
Detail of Grants Over DM 5 Million
Grants in Biotechnology
Grants in Computers, Microelectronics
Grants in Aviation Technology
Grants in Robotics, FMS
Grants in Space Research, Satellites

AEG Telefunken Reorganizes Research Facilities in FRG
(Hans Gissel; TECHNISCHE RUNDSCHAU, 22 Nov 83)..... 64

France Takes Steps To Promote Industrial Research
(AFP SCIENCES, 8 Dec 83)..... 67

France Wants To Make Toulouse New 'Silicon Valley'
(Sophie Seroussi; LE NOUVEL ECONOMISTE, 26 Dec 83)..... 70

French Research Minister Defines New CNRS Policy
(AFP SCIENCES, 5 Jan 84)..... 74

Siemens Official Comments on Lag in FRG Electronics Industry
(Kjell Brodda; SVENSKA DAGBLADET, 5 Jan 84)..... 76

Briefs
French Council for Electronics 79

TECHNOLOGY TRANSFER

Mysterious East Bloc Deals of Herr Mueller
(Hermann Renner; DIE WELT, 21 Dec 83)..... 80

JPRS-WST-84-007

21 February 1984

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

AEROSPACE

Costs, Payload of Ariane, U.S. Space Shuttle Compared
(Roger E. Lo; DFVLR-NACHRICHTEN, Nov 83) 1

AUTOMOBILE INDUSTRY

Mercedes-Benz Auto 2000 Achieves Low Drag Coefficient
(Albert Hack, Ruediger Faul; AUTOMOBIL INDUSTRIE, Sep 83) 5

Status of French Research in Plastic Batteries
(Philippe Douroux; L'USINE NOUVELLE, 15 Dec 83) 10

PSA, Renault Work on 'All Fuel' Automobile Engine
(L'USINE NOUVELLE, 12 Jan 84) 12

BIOTECHNOLOGY

German Research Focusing on New Antibiotics
(FRANKFURTER ZEITUNG/BLICK DURCH DIE WIRTSCHAFT, 27 Dec 83) 13

International Competition Fosters Interferon Research
(Adalbert Budzinski; CHEMISCHE INDUSTRIE, Dec 83) 16

Swiss Society Promotes Microbiology, Bioenergy
(A. Fiechter, et al.; CHEMISCHE RUNDSCHAU, 21 Dec 83) ... 21

FACTORY AUTOMATION

France To Promote Industrial Automation With New Program
(VDI NACHRICHTEN, 6 Jan 84) 26

FRG Invests DM20 Million in Materials Handling Research
(VDI NACHRICHTEN, 16 Dec 83) 28

Robot Use in FRG Increases But Sensor Technology Lags
(VDI NACHRICHTEN, 6 Jan 84) 30

MICROELECTRONICS

FRG Esprit Participation Hinges on Yearly Funding Limit
(Wynold Verwey; NRC HANDELSBLAD, 24 Jan 84) 31

Update on French Electronics Industry Program
(ZERO UN INFORMATIQUE, Jan 84) 32

French Dry-Etch Equipment for Electronics Production
(Herve Rolland, Laurent Renault; L'USINE NOUVELLE,
5 Jan 84)..... 35

SCIENTIFIC AND INDUSTRIAL POLICY

Bull To Produce Computers in Brazil for Third-World Market
(Daniel Solano; L'USINE NOUVELLE, 19 Jan 84) 36

Dutch, U.S. Firms Form Joint Venture for Laser Research
(NRC HANDELSBLAD, 26 Jan 84) 38

Briefs
Berlin Technology Promotion Center 40

JPRS-WST-84-008

29 February 1984

WEST EUROPE REPORT
SCIENCE AND TECHNOLOGY

CONTENTS

ADVANCED MATERIALS

Pechiney Strategy Includes Development of New Materials
(Jean Roume; L'USINE NOUVELLE, 19 Jan 84) 1

AEROSPACE

European Views Differ on Space Station Concept
(Guenter Paul; FRANKFURTER ALLGEMEINE ZEITUNG, 11 Jan 84) 3

MBB/Erno's Views, Future Plans in Aerospace Activities
(FRANKFURTER ALLGEMEINE ZEITUNG, 20 Jan 84) 6

AUTOMOBILE INDUSTRY

Italian Laser Research Applied in Automobile Factories
(Giuseppe Oddo; MONDO ECONOMICO, 26 Oct 83) 8

Passenger Car Sales Aid Growth of Daimler Benz in FRG
(FRANKFURTER ALLGEMEINE ZEITUNG, 16 Dec 83) 10

COMPUTERS

Briefs
Interface Software for Airbus Industrie 12

METALLURGICAL INDUSTRIES

Sweden Develops New Rapid Solidification Process
(TEKNIK I TIDEN, Autumn 1983) 13

France Develops New Continuous Vacuum Treatment Method
(Jean Nenin; L'USINE NOUVELLE, 26 Jan 84) 17

MICROELECTRONICS

STC Modernizes Footscray Plant for 1.5 Micron Technology
(ELECTRONIQUE ACTUALITES, 13 Jan 84) 20

Briefs
French One-Micron C-MOS 22

SCIENTIFIC & INDUSTRIAL POLICY

Philips' Executive Says Production Costs Cause Losses
(F.F. Otten, R.J.A. de Lange Interview; NRC HANDELSBLAD, 15 Dec 83) 23

Dutch Government Expands Funding for Information Technology
(Wilma Cornelissen; NRC HANDELSBLAD, 17 Jan 84) 28

Editorial Comments on Information Technology Funding
(Editorial; NRC HANDELSBLAD, 19 Jan 84) 30

Dutch Government To Fund Information Technology Development
(Zeger Luyendijk; NRC HANDELSBLAD, 18 Jan 84) 32

ANVAR in France Announces Budget, Goals for 1983-84
(AFP SCIENCES, 19 Jan 84) 36

French Industrial Development Funds: Collection, Distribution
(Marie-Jeanne Pasquette; L'USINE NOUVELLE, 22-29 Dec 83). 39

Riesenhuber, Lambsdorff Clash Over Funding for FRG Research
(FRANKFURTER ALLGEMEINE ZEITUNG, 3 Jan 84; VDI NACHRICHTEN, 9 Dec 83) 45

Research, Economic Ministries Overlap
R&D Personnel Funds Cut

Special Depreciation Allowance for FRG R&D Firms
(HANDELSBLATT, 13 Dec 83) 47

TECHNOLOGY TRANSFER

SS-20 Packed With Western Technology
(DER SPIEGEL, 26 Dec 83) 48

French-U.S. Joint Venture Develops 'Trimos' Technology
(Herve Rolland; L'USINE NOUVELLE, 19 Jan 84) 56

JPRS-WST-84-009

21 March 1984

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

AEROSPACE

Details on SPOT Remote Sensing Satellite Propulsion Unit
(J. C. Corai; L'AERONAUTIQUE ET L'ASTRONAUTIQUE, No 103, 1983) 1

AUTOMOBILE INDUSTRY

Nissan To Build Pilot Automobile Plant in UK
(AFP-AUTO, 2 Feb 84) 19

FRG's Daimler-Benz Buys Majority in South African Auto Firm
(VDI NACHRICHTEN, 3 Feb 84) 22

Turin Group Surveys Italian Auto R&D Expenditures 1979-80
(Ruggero Cominotti; ATA INGEGNERIA AUTOMOTORISTICA, Oct 83) 23

Briefs
VW R&D Expenditures 30

CIVIL AVIATION

Pessimistic FRG Airbus Market Survey Withheld From Bonn
(WIRTSCHAFTSWOCHE, 20 Feb 84) 31

COMPUTERS

Tandberg Data of Norway Lowers Prices To Compete in U.S.
(Brit Myhrvold; AFTENPOSTEN, 2 Feb 84) 33

Siemens Introduces New Minicomputers To Compete With IBM
(MINIS ET MICROS, 28 Nov 83) 35

Briefs
New French Scientific Data Bank 37

FACTORY AUTOMATION

French Firm Plans Recapture of Domestic CAD/CAM Market
(ELECTRONIQUE ACTUALITES, 13 Jan 84) 38

French Consulting Firm Develops Own Robotics
(Andre Larane; INDUSTRIES ET TECHNIQUES, 10 Oct 83) 40

Italy Invents Robot To Compete With Asea, Hitachi
(Carlo Arcari; MONDO ECONOMICO, 3 Nov 83) 43

SGS Automates Transistor Packaging in Italy
(INDUSTRIES ET TECHNIQUES, 10 Dec 83) 45

MICROELECTRONICS

First Thomson Gallium Arsenide Standard Cell
(ELECTRONIQUE ACTUALITES, 3 Feb 84) 47

French Firm To Do Microprocessor, Software Research
(TOUTE L'ELECTRONIQUE, Dec 83) 50

Japanese Firm (Epson) Sets Up Subsidiary in France
(TOUTE L'ELECTRONIQUE, Dec 83) 51

Briefs
Thomson Reorganizes FRG Subsidiaries 52

SCIENTIFIC AND INDUSTRIAL POLICY

Fabius on France's Research Funding Goal, New R&D Measures
(Laurent Fabius Interview; LE MONDE, 11 Feb 84) 53

Earnings, Activities of France's SEP Reviewed for 1983
(AFP SCIENCES, 2 Feb 84) 58

JPRS-WST-84-010

27 March 1984

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

ADVANCED MATERIALS

Sweden Invents New Ceramic for More Durable Cutting Tools
(Lars Pekka; NY TEKNIK, 15 Dec 83) 1

AEROSPACE

French CNES Approves Fr 4 Billion Budget for 1984
(VDI NACHRICHTEN, 27 Jan 84) 3

Head of ESA Advocates Participation in U.S. Space Station
(AFP SCIENCES, 2 Feb 84) 5

Ariane Will Wait Only Until 15 March for Delayed Intelsat
(AFP SCIENCES, 2 Feb 84) 7

AUTOMOBILE INDUSTRY

Renault, Peugeot Work on Future Models in Secret
(AFP AUTO, 30 Jan 84) 8

Briefs
Electronic LPG Injection System 9

BIOTECHNOLOGY

Bioenergy, Solar Biotech Research in France, Europe
(M. F. Chevallier, R. Nussbaum; BIOFUTUR, Nov 83) 10

CIVIL AVIATION

Marketing Head Says AI May Seek Partners in America, Asia
(VDI NACHRICHTEN, 20 Jan 84) 30

Subcontractors, Market Potential for Fokker 50, 100
(WIRTSCHAFTSWOCHE, 10 Feb 84) 32

Briefs
Fifth Possible Buyer for A-320 35

MICROELECTRONICS

Siemens To Hire 150 Microelectronics Researchers
(Elisa Gregor; PROFIL, 6 Feb 84) 36

SCIENTIFIC AND INDUSTRIAL POLICY

Denmark Proposes Kr 1.5 Billion Technology Development Program
(Ib Worning; BERLINGSKE TIDENDE, 30 Jan 84) 38

FRG Seeks Ways To Promote Venture Capital Investment
(VDI NACHRICHTEN, 10 Feb 84) 44

Swedish Technical Board Promotes Own 'Silicon Valley'
(TEKNIK I TIDEN, Winter 1984) 46

Sweden Invests 700 Million Kr in Microelectronics Program
(Lennart Lindeborg, Bjorn Englund; TEKNIK I TEDEN,
Winter 1984) 48

Risk Capital Investment in Sweden, FRG, UK, France
(TEKNIK I TIDEN, Winter 1984) 53

FRG Debates Competitiveness, Efficacy of Domestic R & D
(VDI NACHRICHTEN, 3 Feb 84) 57

Bundestag Discussion
Economic Institute Releases Study

Briefs
FRG Center for 'Innovative Computers' 61

JPRS-WST-84-011

9 April 1984

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

ADVANCED MATERIALS

Qualities of SEP Ceramic-Ceramic Cerasep Composites
(M. B. Malassine; INGENIEURS DE L'AUTOMOBILE, Nov-Dec 83) 1

AEROSPACE

Review of Financial Staus of SEP in France
(Patrick Piernaz; L'USINE NOUVELLE, 23 Feb 84) 4

AUTOMOBILE INDUSTRY

Belgium To Make Van Doorne Continuously Variable Transmission
(NRC HANDELSBLAD, 16, 22 Feb 84) 6

Various Cars to Use CVT's
Background, Funding for CVT

BIOTECHNOLOGY

German Biotechnology Compared to American
(VDI NACHRICHTEN, 16 Dec 83) 10

Status of Biotechnology in Italy
(EUROPA CHEMIE, 15 Feb 84) 12

Research, Industrial Biotechnology in Netherlands
(Bert Bosker; PT AKTUEEL, 30 Nov 83) 14

Finland's Industry Turning to Biotechnology
(Heikki Arola; HELSINGIN SANOMAT, 28 Feb 84) 18

UNESCO Official on Biotechnology in Developing Countries
(Albert Sasson Interview; BIOFUTUR, Feb 84) 22

Interview With Philippe Kourilsky of Pasteur Institute
(Philippe Kourilsky; SCIENCE ET AVENIR, Jan 84) 27

COMPUTERS

French ONERA Acquires U. S. Supercomputer for Research
(AFP SCIENCES, 26 Jan 84) 30

Bull Strategy Includes IBM Communications Capability
(Philippe Marel; ELECTRONIQUE ACTUALITIES, 27 Jan 84) 31

MICROELECTRONICS

Thomson Semiconductors Bipolar IC Strategy to 1986
(J.-P. Della Mussia; ELECTRONIQUE ACTUALITES, 24 Feb 84) 33

SCIENTIFIC AND INDUSTRIAL POLICY

Conclusions of Netherlands Report on Domestic Technology
(NRC HANDELSBLAD, 13 Feb 84) 37

Sweden Funds Basic Research With Industrial Applications
(Eric Dyring; DAGENS NYHETER, 10 Feb 84) 43

Swedish Venture Capital Firms Fund Optical Switch Invention
(Kerstin Kall; DAGENS NYHETER, 9 Feb 84) 45

TECHNOLOGY TRANSFER

Briefs
British 'Pruteen' Technology Bartered to USSR 46
Framework for French Sales to USSR 46

JPRS-WST-84-012

18 April 1984

WEST EUROPE REPORT
SCIENCE AND TECHNOLOGY

CONTENTS

ADVANCED MATERIALS

MBB Uses New CFC Form Tool for Titanium Alloy Air Intake
(VDI NACHRICHTEN, 2 Mar 84)..... 1

AEROSPACE

Calendar of Ariane Launches 1984-1987
(AFP SCIENCES, 23 Feb 84)..... 3

CNES of France Reorganizes Its General Management
(AFP SCIENCES, 1 Mar 84)..... 6

CNES of France Creates Quality Assurance Branch
(Marc Chabreuil; L'USINE NOUVELLE, 15 Mar 84)..... 9

Briefs
July Launches for Ariane III 11
Spot Tests Succeed 11

AUTOMOBILE INDUSTRY

Peugeot Talbot of France To Invest in UK Plant
(AFP AUTO, No 3435, Mar 84)..... 12

GDR To Build VW Engines in Plant Supplied by VW
(Various sources, various dates)..... 13

General Terms of Contract
Chance To Obtain Technology
Political, Economic Comments, by Rainer Frenkel

Briefs
VW Research Center 20

BIOTECHNOLOGY

British Consider Biotech Data Bank
(CHEMISCHE RUNDSCHAU, 12 Oct 83)..... 21

Bayer Chairman Praises Government Support
(CHEMISCHE RUNDSCHAU, 26 Oct 83)..... 22

CIVIL AVIATION

Briefs
Stretched ATR Planned 23

COMPUTERS

New French Injection Mold Software Competes With U.S. Product
(L'USINE NOUVELLE, 23 Feb 84)..... 24

Norsk Data of Norway, Matra of France Rumored Near Accord
(ELECTRONIQUE ACTUALITES, 24 Feb 84)..... 26

Briefs
Canada-FRG Computer Agreements 28
Netherlands-Japan Research Agreement 28

FACTORY AUTOMATION

Interview With Director of French Asea Robotics Branch
(E. Vassiliu Interview; MICRO ET ROBOTS, Mar 84)..... 29

French Robotics Research at Grenoble Labs
(Jean-Claude Hanus; MICRO ET ROBOTS, Mar 84)..... 32

French CGE To Sell Flexible Workshops, Computerized Factories
(Michel Defaux, Philippe Douroux; L'USINE NOUVELLE, 15 Mar 84)..... 37

French Firm Develops New Kind of CTD Camera for Robots
(AFP SCIENCES, 23 Feb 84)..... 40

French Capabilities in CAD, Flexible Workshops, Robots
(LES ECHOS, 15 Feb 84)..... 42

Artificial Intelligence Laboratories
French CAD Software, by Catherine Levi

FMS at Renault Vehicles
Flexible Workshop Locations
Robotics Research Institutes
Domestic Robotics Market

MATRA, Renault-France Collaborate on CAD-CAM Marketing
(ELECTRONIQUE ACTUALITES, 9 Mar 84; AFP SCIENCES,
8 Mar 84)..... 47

R&D Plan Being Developed, by H. Pradenc
Background on MATRA-Datavision

Briefs
Alsthom-Atlantique Robot Division 50

MICROELECTRONICS

Smaller French High-Tech Firms Import Most Components
(LES ECHOS, 8 Feb 84)..... 51

Domestic Suppliers 'Uninterested', by Jean
Deflaceliere, Catherine Levi
Opinion of Nationalized Firm

Briefs
Bull, MATRA IC Agreement 53
Austrian Microelectornics Program Funding 53

SCIENTIFIC AND INDUSTRIAL POLICY

France Adopts Measures To Promote Industrial Research
(AFP SCIENCES, 23 Feb 84)..... 54

TECHNOLOGY TRANSFER

Briefs
FRG's Huels Trains Soviet Chemists 56

JPRS-WST-84-013

24 April 1984

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

ADVANCED MATERIALS

Britain's ICI Develops New Easy-to-Shape Composites
(Pierre Laperrousaz; L'USINE NOUVELLE, 2 Feb 84) 1

Swedish Activities in New Ceramic Materials, Processes
(Leif Hermansson, Roger Carlsson; KEMISK TIDSKRIFT, Jan 84) 3

BIOTECHNOLOGY

EEC Sets Up Five-Year Biotechnology Development Program
(Staffan Dahllof; NY TEKNIK, 12 Jan 84) 8

Developments Worldwide, Competition With French Surveyed
(Bertrand Le Balc'h; L'USINE NOUVELLE, 23 Feb 84) 10

Belgian Firms Join Resources, Research Emzymes
(Jacques Poncin; LE SOIR, 7 Mar 84) 21

FACTORY AUTOMATION

French CGE Planning To Become Factory Automation Leader
(ELECTRONIQUE ACTUALITES, 17 Feb 84) 23

Matra-Automation Plans Industrial Automation Products
(H. Pradenc; ELECTRONIQUE ACTUALITES, 17 Feb 84) 24

Sweden's ASEA: Background, Strategies, Present Director
(Percy Barnevik Interview; MANEDSJOURNALEN, Feb 84) 26

MICROELECTRONICS

Swedish Firm To Make Own Gallium-Arsenide-Type Components
(Ulla Karlsson; NY TEKNIK, 19 Jan 84) 31

Matra Harris Semiconductors in France Plans New Products
(ELECTRONIQUE ACTUALITES, 24 Feb 84) 33

Italy's SGS Invests To Modernize Rennes Plant in France
(ELECTRONIQUE ACTUALITES, 24 Feb 84) 35

Briefs
Siemens Invests in Micronics IC's 37

SCIENTIFIC AND INDUSTRIAL POLICY

Finland Debates Law To Permit Increased Foreign Investment
(Matts Dumell; FORUM FOR EKONOMI OCH TEKNIK, 14 Mar 84) ... 38

TECHNOLOGY TRANSFER

New Renault-Moskvitch Cooperation Agreement Examined
(Jacques Cramaix; REVOLUTION, 27 Jan 84) 43

JPRS-WST-84-014

4 May 1984

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

ADVANCED MATERIALS

New Material, Process Spins Off From Volvo LCP 2000 Program
(PLASTFORUM SCANDINAVIA, No 1-2, 1984) 1

AUTOMOBILE INDUSTRY

Peugeot President on 1984 Outlook, Future of Talbot
(J.-P. Jagu-Roche; L'ARGUS DE L'AUTOMOBILE, 2 Feb 84) 4

Peugeot Formulates Strategies To Become Profitable Again
(L'USINE NOUVELLE, 16 Feb 84) 8

British Group Develops Composite Spiral Spring
(AFP-AUTO, 15 Feb 84) 14

Briefs
Revenue for Renault Portugal 15
Renault, U.S. Firm Laser Contract 15

CIVIL AVIATION

Financial, Economic Commentary on Airbus, European Aviation
(Philippe Gazier, Jean Gloaguen; LE NOUVEL ECONOMISTE,
5 Mar 84) 16

COMPUTERS

Siemens To Regroup DP, Telecom Activities in One Division
(ELECTRONIQUE ACTUALITES, 17 Feb 84; ZERO UN INFORMATIQUE
HEBDO, 2 Jan 84) 21

General Terms of Reorganization
Details of Reorganization Plan

Strategy, New Products of Bull in France
(ZERO UN INFORMATIQUE HEBDO, 9 Jan 84; MINIS ET MICROS, 13 Feb 84) 26

Interview With Marketing Director
Details on New Products, by Violaine Prince

France's Bull Adds Dual-Processors to DPS 7 Line
(ELECTRONIQUE ACTUALITES, 16 Mar 84) 32

Briefs
Bull Office Automation Plans 34

FACTORY AUTOMATION

Italy's Fiat Uses Sweden's Asea Seeing Robot
(MONDO ECONOMICO, 22 Mar 84) 35

MICROELECTRONICS

French Institute Studies European Patents Filed Jan-Jun 1983
(INDUSTRIES ET TECHNIQUES, 20 Feb 84) 37

EEC 'Microelectronics Plan' Aimed at Semiconductor Industry
(ELECTRONIQUE ACTUALITES, 16 Mar 84) 40

Bull, Philips Sign Standardization Agreement
(AFP SCIENCES, 9 Feb 84) 42

First Phase of Esprit Program To Study CAD/CAM, VLSI
(ELECTRONIQUE ACTUALITES, 16 Mar 84) 44

French CNET Develops 'Proteus' Single-Chip Microprocessor
(AFP SCIENCES, 9 Feb 84) 46

Review of Finnish Electronics Industry Includes Nokia, Apso
(H. Pradenc; ELECTRONIQUE ACTUALITES, 16 Mar 84) 48

Briefs
New FRG Ministry Possible 51
MATRA-Data-Processing, Datapoint Agreement 51

SCIENTIFIC AND INDUSTRIAL POLICY

Criteria for Qualifying for FRG Federal CAD/CAM Subsidies
(COMPUTERWOCHE, 27 Jan 84) 52

Briefs
Expenditures of Anvar in France 55

TECHNOLOGY TRANSFER

Finnish Firm With USSR Trade Ties Buys FRG Robotics Firm
(HELSINGIN SANOMAT, 28 Feb 84) 56

JPRS-WST-84-015

14 May 1984

WEST EUROPE REPORT
SCIENCE AND TECHNOLOGY

CONTENTS

ADVANCED MATERIALS

Briefs
Lead Composite for Battery 1

AEROSPACE

Briefs
Belgian Control System at Kourou 2
Canadian 1984 Space Research Budget 2

CIVIL AVIATION

Survey of European Subcontractors for Airbus Program
(Pierre Bary; LE SOIR, 19 Apr 84)..... 3

Regional Discord May Delay Belgian Participation in Airbus
(LE SOIR, 28/29 Apr 84)..... 6

COMPUTERS

Products, R&D at France's Software Engineering Institute
(ZERO UN INFORMATIQUE HEBDO, 13 Feb 84)..... 7

User Study Finds Fault With Bull After-Sales Service
(Fabienne Tisserand; ZERO UN INFORMATIQUE HEBDO,
20 Feb 84)..... 9

Canada's Northern Telecom Invests in New 'Vienna'
(Jena-Louis Cousin; ZERO UN INFORMATIQUE HEBDO,
12 Mar 84)..... 12

Bull Financial Status in France, Belgium for 1983
(AFP SCIENCES, 22 Mar 84; ZERO UN INFORMATIQUE HEBDO, 20 Feb 84)..... 15

Losses in France
Profits in Belgium

Study Shows France Lacks Computer Specialists
(AFP SCIENCES, 29 Mar 84)..... 17

FACTORY AUTOMATION

Status of French Advanced Automation, Robotics Project
(ZERO UN INFORMATIQUE HEBDO, 13 Feb 84)..... 19

MICROELECTRONICS

Thomson Semiconductors To Specialize in Semicustom IC's
(F. Grosvalet; ELECTRONIQUE ACTUALITES, 17 Feb 84)..... 21

Matra's 1983 Earnings in Components, Data-Processing
(Guy Hervier; ZERO UN INFORMATIQUE HEBDO, 20 Feb 84)..... 24

Philips To Combine Communication, Information Branches
(NRC HANDELSBLAD, 5 Apr 84)..... 28

Philips Revenue, Profits by Sector in 1983
(Piet de Wit; ELSEVIERS WEEKBLAD, 7 Apr 84)..... 30

Briefs
Funds for French Firms 34

SCIENTIFIC AND INDUSTRIAL AFFAIRS

Funds Granted by Anvar in 1983 to French Industries
(INDUSTRIES ET TECHNIQUES, 1 Mar 84)..... 35

Allotment of Funds, Tax Subsidies for FRG R&D
(Albert Probst; FRANKFURTER ZEITUNG/BLICK DURCH DIE WIRTSCHAFT, 22 Mar 84)..... 38

Role of Joint Ventures, New Markets in Siemens Profit Increase

(NEUE ZUERCHER ZEITUNG, 30 Mar 84)..... 43

Briefs
Siemens Expands Regensburg Facilities 46

JPRS-WST-84-016

21 May 1984

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

AEROSPACE

France Announces 1984 Budget for Space Activities, CNES
(AFP SCIENCES, 22 Mar 84)..... 1

SEP of France To Build Stations for Receiving Spot Data
(ELECTRONIQUE ACTUALITES, 16 Mar 84)..... 7

Innovation Incentives, R&D Strategy at Italy's Agusta
(Raffaello Teti; AVIAZIONE, Mar 84)..... 9

SCIENTIFIC AND INDUSTRIAL POLICY

Labor Union Sets Up Denmark's Largest Venture Capital Firm
(Staffan Dahllof; 7 DAGAR, 27 Apr 84)..... 15

Role of CNRS, ANVAR in Aiding French Research
(AFP SCIENCES, 29 Mar 84)..... 18

Riesenhuber Urges Closer Ties Between Research, Industry
(FRANKFURTER ALLGEMEINE ZEITUNG, 28 Apr 84)..... 21

Organization, Funding of R&D in Switzerland
(LANDRAPPORT, Dec 83)..... 22

Research Institutes, Projects
Scientific Research Commission

Briefs
No Growth for FRG Venture Capital 30

JPRS-WST-84-017

24 May 1984

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

AEROSPACE

Outline of Arianespace Plans, Launch Schedule Through 1987
(Jacques Bourg; AVIATION MAGAZINE INTERNATIONAL, 15 Mar 84) - 1

CIVIL AVIATION

Airbus Product Line, Production Rate, Sales
(SUEDDEUTSCHE ZEITUNG, 30 Mar 84) 4

V2500, CFM56-4 Competition for 150-Seater Market
(Jean-Jacques Valignat; AVIATION MAGAZINE INTERNATIONAL, 15 Mar 84) 6

Pilot CAD/CAM Center at France's Aerospatiale
(AVIATION MAGAZINE INTERNATIONAL, 15 Mar 83) 9

COMPUTERS

Europe Plans International Computer Network
(COMPUTERWOCHE, 2 Mar 84) 12

Computer-Aided Information System To Connect FRG Scientists
(VDI NACHRICHTEN, 6 Apr 84) 13

EC Experts Comment on Prospects for 'ESPRIT' Program
(Detlef Puhl; FRANKFURTER RUNDSCHAU, 23 Mar 84) 14

FACTORY AUTOMATION

Briefs
New Trallfa Hydraulic Robot 17

MICROELECTRONICS

Results of FRG's Siemens for First Quarter 1984
(VDI Nachrichten, 13 Apr 84) 18

UK Government Announces Microchip Investment Aid Program
(Roland Gribben; THE DAILY TELEGRAPH, 20 Mar 84) 20

SCIENTIFIC AND INDUSTRIAL POLICY

FRG Hammers Out Plan for Massive Aid to Electronics Industry
(WIRTSCHAFTSWOCHE, 9 Mar 84; HANDELSBLATT, 15 Mar 84) 21

Opinions, Approaches Differ
Consensus Reached, New Figures

FRG Research Minister on Priority Areas for R&D Aid
(Heinz Riesenhuber; HANDELSBLATT, 4 Apr 84) 26

Berlin Venture Capital Firm Begins Operation
(VDI NACHRICHTEN, 6 Apr 84) 29

Exhibition Shows Japan Broad Spectrum of FRG S&T Activities
(Werner Gries; FRANKFURTER ZEITUNG/BLICK DURCH DIE WIRTSCHAFT
18 Apr 84) 30

TECHNOLOGY TRANSFER

Swedish Companies Circumvent Computer Embargo
(Bjorn Anders Olson; DAGENS NYHETER, 19 Apr 84) 35

Annual Report Cites S&T Espionage Increase in FRG
(HANDELSBLATT, 9 Apr 84) 37

Association Unites FRG Researchers, Industry Representatives
(HANDELSBLATT, 3 Apr 84) 38

Briefs
France-Egypt Technology Transfer 40
FRG-USSR Machine Tools 40

JPRS-WST-84-018

4 June 1984

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

AEROSPACE

Facilities, Firms at Kiruna Space Center in Sweden
(Lars Pekka; NY TEKNIK, 1 Mar 84)..... 1

Second Ariane Launch Pad at Kourou, Belgian Participation
(Paul Dominique; LA LIBRE BELGIQUE, 6 Mar 84)..... 4

ADVANCED MATERIALS

Sweden's STU Proposes Funding for Metals, Ceramics Research
(TEKNIK I TIDEN, late winter 83)..... 8

New Asea Branch Formed To Do Ceramics Research
(TEKNIK I TIDEN, late winter 83)..... 10

ERRATUM: New Material, Process Spins Off From Volvo LCP 2000 Program

(PLASTFORUM SCANDINAVIA, No 1/2, 1984)..... 12

BIOTECHNOLOGY

Recent Biotech Developments, Plans in France
(BIO LA LETTRE DES BIOTECHNOLOGIES, Feb, Mar 84)..... 15

Rhone-Poulenc Enters Market
Government Promotes Biosensors
International Training Organized
Training Accord With Japanese
Animal Feed Initiative
Water Purification Project
Monoclonal Antibody Production
UPSA Developing Interferon
ELF Aquitaine Expanding

Budget, 1983 Program of French Biotech Committee
(BIO LA LETTRE DES BIOTECHNOLOGIES, Feb 83)..... 22

CIVIL AVIATION

Fokker Records Profit for '83, Sees Good Prospects for '84
(NRC HANDELSBLAD, 24 Apr 84)..... 29

Discussion of French Financial Participation in A 320
(LES ECHOS, 12, 13 Mar 84)..... 32

Government Fundings, Loans, by Hubert Levet
France in Good Position, by Airy Routier

COMPUTERS

Olivetti Ready To Compete, Introduces IBM-Compatible PC's
(Karin Kaas; BERLINGSKE TIDENDE, 16 Apr 84)..... 35

MICROELECTRONICS

Siemens Plans 256 K Memory Chip To Catch Up With Japan
(Ulf Peter Hellstrom; AFTENPOSTEN, 19 Mar 84)..... 38

Siemens Strategy Includes DM 1 Billion for Submicron IC's
(HANDELSBLATT, 6/7 Apr 84)..... 41

Description of FRG Basic Research in X-Ray Lithography
(Franz Frisch; DIE ZEIT, 23 Mar 84)..... 43

SCIENTIFIC AND INDUSTRIAL POLICY

FRG To Subsidize CAD, Electronics, Computers Through 1988
(Claudia Marwede-Dengg; COMPUTERWOCHE, 23 Mar 84)..... 47

Third Venture Capital Company Founded in Berlin
(FRANKFURTER RUNDSCHAU, 11 Apr 84)..... 50

Nixdorf, SEL, Three Banks Found Berlin Venture Capital Firm
(FRANKFURTER ALLGEMEINE ZEITUNG, 7 Apr 84)..... 52

Briefs
Ericsson Floats Record Loan 53

TECHNOLOGY TRANSFER

Advanced Software Stolen From West for Sale to East
(Rolf Stengard; DAGENS NYHETER, 6 Apr 84)..... 54

JPRS-WST-84-019

7 June 1984

WEST EUROPE REPORT
SCIENCE AND TECHNOLOGY

CONTENTS

AEROSPACE

Briefs
Spot Instrument Testing 1

AUTOMOBILE INDUSTRY

DP Network Links Functional Areas at Daimler-Benz
(Waldemar Schaefer; HANDELSBLATT, 21 Mar 84)..... 2

BIOTECHNOLOGY

Venture Capital Initiatives in FRG
(BIO LA LETTRE DES BIOTECHNOLOGIES, Feb 84)..... 5

New Firms Enter Market
University-Industry Ties Established

Briefs
European Biosensor Market Expanding 7
Biogen, Novo Trade in U. S. 7

CIVIL AVIATION

AI Sales Head Discusses Plans for TA-11 Long-Range Airbus
(Horst Rademacher; FLUG REVEU, Mar 84)..... 8

COMPUTERS

Discussion of IBM Compatibility Issue at Siemens
(Hermann Boessenecker; DIE ZEIT, 23 Mar 84)..... 10

FACTORY AUTOMATION

Briefs
Number of UK Robots 14

MICROELECTRONICS

Revenue, R&D in Microwave Components Branch of Thomson
(J. P. Feste; INTER ELECTRONIQUE, 13 Feb 84)..... 15

Review of Computers, Software, Peripherals at Hanover Fair
(Jacques Antoine, Charles Kercy; L'USINE NOUVELLE, 3 May 84). 17

Briefs
Swedish Gallium Arsenide Transistor 22

SCIENTIFIC AND INDUSTRIAL POLICY

Canada Outlines 1984 Research, Development Budget
(AFP SCIENCES, 26 Apr 84)..... 23

Market Share, Strategy of FRG's Nixdorf in U. S.
(INDUSTRIEMAGAZIN, Feb 84)..... 24

Current Status, Funds of Main FRG Venture Capital Firms
(INDUSTRIEMAGAZIN, Feb 84)..... 30

FRG Software Firm Receives Venture Capital Funding
(DIE COMPUTER ZEITUNG, 4 Apr 84)..... 36

Austria To Fund Microelectronics, Computers in 1984-1987
(DIE COMPUTER ZEITUNG, 14 Mar 84)..... 38

Briefs
Dutch-German High Tech Cooperation 40

JPRS-WST-84-020

18 June 1984

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

ADVANCED MATERIALS

French, Japanese Form Carbon Fiber Firm
(J.J.; LES ECHOS, 6 Apr 84)..... 1

Glass, Carbon Fibers Made at Fibre Et Mica in France
(INDUSTRIES ET TECHNIQUES, 10 Apr 84)..... 3

Pechiney Joins Elf-Toray To Produce Ceramics, Carbon Fibers
(Alain Pauche; L'USINE NOUVELLE, 17 May 84)..... 6

France, Others Increase Silicon Production Capacities
(Jacqueline Mattel; LES ECHOS, 26 Mar 84)..... 10

Briefs
New Powder Metal Procedure 12
French Fiber Research 12

AUTOMOBILE INDUSTRY

New Volvo Body Plant Thought To Be World Technological Leader
(Ulf Peter Hellstrom; AFTENPOSTEN, 30 Apr 84)..... 13

European Firm Has Prototype Plastic Battery
(Philippe Le Coeur; INDUSTRIES ET TECHNIQUES, 10 Apr 84).. 15

BIOTECHNOLOGY

German Research, Future Potential Evaluated
(BILD DER WISSENSCHAFT, Apr 84)..... 17

German Commercial Initiatives Including Biosyntech, Bioferon
(Rolf Andreas Zell, Thorwald Ewe; BILD DER WISSENSCHAFT, Apr 84)..... 32

CIVIL AVIATION

Discussion of Belgian Participation in A 320 Program
(LE SOIR, 21 Mar 84, LA LIBRE BELGIQUE, 23 Mar 84)..... 50

Financial, Regional Problems, by Pierre Bary
Further Details

COMPUTERS

France Developing Computer Aid To Artificial Intelligence
(AFP SCIENCES, 26 Apr 84)..... 53

Norway's Norsk Data Shows Sharp Sales Increase
(AFTENPOSTEN, 14 May 84)..... 55

FACTORY AUTOMATION

Review of Automation, Robotics Exhibit in Milan
(Andre Larane; INDUSTRIES ET TECHNIQUES, 10 Apr 84)..... 57

Status of France's Machine-Tool Plan
(Patrick Piernaz; L'USINE NOUVELLE, 17 May 84)..... 59

Briefs
SAGEM Flexible Workshop at SNIAS 64
Renault Robotics Factory 64

METALLURGICAL INDUSTRIES

British Firm Has New Aluminum-Lithium Alloy
(Dominique Benasteau; L'USINE NOUVELLE, 10 May 84)..... 65

MICROELECTRONICS

ERRATUM: Thomson Semiconductors To Specialize in Semicustom IC's
(F. Grosvalet; ELECTRONIQUE ACTUALITIES, 17 Feb 84)..... 67

SCIENTIFIC AND INDUSTRIAL POLICY

Products, Strategy, Management of FRG's Siemens Analyzed
(Claude Amalric; L'USINE NOUVELLE, 10 May 84)..... 70

Norwegian Savings Banks Form Venture Capital Company
(Thomas Knutzen; AFTENPOSTEN, 18 May 84)..... 82

TECHNOLOGY TRANSFER

Scientific Research, Innovation Zone Planned at Strasbourg
(P.M.; LES ECHOS, 24 Feb 84)..... 84

JPRS-WST-84-021

28 June 1984

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

AEROSPACE

ESA: 80 Million ECU's To Study Participation in U.S. Station
(AFP SCIENCES, 17 May 84)..... 1

Briefs
Spot Receiving Station Delivered 2

AUTOMOBILE INDUSTRY

Briefs
FRG-Japan Joint Venture 3

BIOTECHNOLOGY

French Reinforce Links to American Biotech
(Philippe Dutertre; L'USINE NOUVELLE, 24 May 84)..... 4

France: University Paris VII-Industry Ties Growing
(BIO LA LETTRE DES BIOTECHNOLOGIES, Apr 84)..... 7

German Research on Beta-Interferon
(VDI NACHRICHTEN, 4 May 84)..... 9

Germany: Genetic Research in Munich
(Martin Urban; SUEDDEUTSCHE ZEITUNG, 9 May 84)..... 11

Briefs
SPD Seeks Research Controls 13

CIVIL AVIATION

FRG's MBB Prepares for Further Expansion
(FRANKFURTER ALLGEMEINE ZEITUNG, 22 May 84)..... 14

Fokker Gets 800 Million Guilder Government Loan
(DE TELEGRAAF, 13 Mar 84)..... 15

COMPUTERS

Business Results for 1983 of France's Bull
(Gerard Schmitt; ZERO UN INFORMATIQUE HEBDO, 26 Mar 84)... 17

Briefs
French-Tunisian Software Accord 19

FACTORY AUTOMATION

Study Reveals Number, Types of Robots Used in FRG in 1983
(PRODUKTION, 5, 19 Jan 84)..... 20

Number of Robots Increases
Details on Types of Robots

SCIENTIFIC AND INDUSTRIAL POLICY

FRG Government-Industry Colloquium Urges European Cooperation
(Klaus Broichhausen; FRANKFURTER ALLGEMEINE ZEITUNG,
15 May 84)..... 24

New Strategy, Leaders Guide Major Thomson Reorganization
(Alain Pauche; L'USINE NOUVELLE, No 15, 12 Apr 84)..... 26

FRG Beefs Up Materials, Information Technology
(VDI NACHRICHTEN, 4 May 84)..... 38

TECHNOLOGY TRANSFER

French Guide to Searching Biotech Databases
(BIOFUTUR, Apr 84)..... 40

END OF FICHE DATE FILMED

AUGUST 29 1984